

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

PBR

South Carolina Manufacturing Extension Partnership

PBR Achieves ISO 14001 Certification

Client Profile:

PBR, a wholly-owned subsidiary of Pacifica Group (an award-winning brake solutions manufacturer), produces aluminum brake calipers, Banksia park brakes, and corner modules for Corvettes and Cadillacs. PBR is located in Columbia, South Carolina, and has sister companies in Knoxville, Tennessee; Australia; Malaysia; Thailand; and Italy. PBR built the 22,300 square meter Columbia facility in 1999 and opened its production lines in July 2000. The company currently employs 250 people.

Situation:

PBR wanted to obtain its ISO 14001 certification. The company discovered that the South Carolina Manufacturing Extension Partnership (SCMEP), a NIST MEP network affiliate, has unique technical understanding of the ISO standards, and asked for its help preparing for certification.

Solution:

SCMEP recommended that PBR enroll in its JumpStart program to expedite preparation for ISO 14001 certification. Though the ISO certification process usually takes 18 months to complete, SCMEP helps companies prepare for certification in only four months. In that time, SCMEP technical specialists and third-party resources work on-site at the client's facility a few days each month to help the company focus on improvement efforts.

SCMEP challenged the company to focus on electricity, wastewater, and gas production and to find unique ways to increase plant capacities while disposing of by-products in an environmentally responsible manner. For example, SCMEP advised PBR to install evaporators to process wastewater and to install coolant spinners as cost-saving measures.

During this time, SCMEP also engaged in other projects with PBR, such as an overall energy audit. SCMEP conducted an assessment of energy consumption and expenditures as part of a Department of Energy grant under the Industries of the Future (IOF) Program to determine if there were any areas where PBR could reduce energy consumption and save money. Annual electric consumption and expenditures for electricity had grown steadily since plant start-up due to increasing load requirements. These expenditures averaged between \$30,000 and \$40,000 per month, or approximately \$420,000 annually. Natural gas consumption had also grown since plant start-up, with annual expenses of approximately \$600,000.

SCMEP's audit of the plant assessed areas of operational concern to see if these issues warranted further detailed study of equipment or systems.

Results:

* Achieved ISO 14001 certification.

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

- * Saved between \$6,000 to \$7,000 per month after installing evaporator.
- * Installed coolant spinners in the cast shop for additional cost savings.
- * Reduced energy usage by 5 percent overall.
- * Used cost savings to expand the machining area by 50 percent.
- * Used cost savings to expand the assembly line by 40 percent.

Testimonial:

"We keep going back to the South Carolina Manufacturing Extension Partnership to see what other services they offer. SCMEP has a great program."

Phil Simmons , Human Resources Manager